

Serial No.: 09/183,715

Filing Date: October 30, 1998

Attorney Docket No. 100.104US01

Title: USING ALTERNATE POLARIZATION IN FIXED WIRELESS SYSTEM DEPLOYMENT FOR IMPROVED CAPACITY

21. (Twice Amended) A method comprising:

dividing a region into a number of communication areas, each communication area including a communication circuit;
communicating using a first polarization in a first portion of each communication area;
communicating using a second polarization in a second portion of each communication area; and
wherein adjacent portions of communication areas between different communication circuits use the same polarization to form communication region belts having the same polarization.

31. (Once Amended) A method comprising:

forming boundaries between bands of communication regions by disposing a number of communication circuits;
communicating using a first polarization in a first region; and
communicating using a second polarization in an adjacent region to the first region.

40. (Once Amended) A method comprising:

forming a number of communication areas, each communication area including a communication circuit, each communication circuit communicating using a first polarization in a first portion of each communication area and a second polarization in a second portion of each communication area;

forming a number of communication regions in belts of either the first or second polarization wherein adjacent portions of communication areas between different communication circuits use the same polarization; and

forming a number of sectors within each communication area, where the first and second portions of the communication area are divided along a number of boundaries of the sectors, each sector communicating on a different subband of a frequency spectrum.

46. (Once Amended) A communication system comprising:

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a number of communication circuits disposed to divide a region into communication areas;

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wherein each communication circuit communicates using a first polarization in a first portion of its communication area and communicates using a second, different polarization in a second portion of its communication area; and

wherein adjacent portions of communication areas between each pair of adjacent communication circuits use the same polarization to form communication region strips of the same polarization.
